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Vol. 95, No. 5
September-October 2004

Department Rounds
1 Change of Command for Navy Medicine

2 A New Device Trains Aviators to Recognize Hypoxia
D.M. Ryan

Features
3 Charlie Med: A Physician's Vietnam Journal - Part III
CAPT W.B. Mahaffey, MC, USN (Ret.)

7 Reducing Unplanned Pregnancy Among Active Duty Sailors
M.R. MacDonald, MS, CHES, CEHT
CAPT B.K. Bohnker, MC, USN(FS)

11 Hizbullah Healthcare: One of the Many Complex Sides to a Terrorist Organization
LCDR Y.H. Aboul-Enein, MSC, USN

14 Combat PTSD Treatment: Navy Reaches Out to Army
LT M.N. Vieten, MSC, USNR
LT D.W. LaBrie, MSC, USNR
HM1 D. Burke, USN
HM1 P. Quijano, USN

17 Operation Passage to Freedom
CAPT J. Amberson, MC, USN (Ret.)

24 Roxie: The Pontiac Ambulance of Parris Island
A.B. Sobocinski

In Memoriam
26 RADM J.S. Cassells, MC, USN (Ret.)
27 CAPT E.D. Thalmann, MC, USN (Ret.)

Announcements
13 Georgetown University Dental Companies
27 Navy Medicine Seeks Articles

Book Review
28 Registered Nurse to Rear Admiral: A First For Navy Women
The First Navy Flight Nurse On A Pacific Battlefield
J.M. Hores

A Look Back
33 Navy Medicine ca. 1930

COVER: 35th Surgeon General of the Navy, VADM Donald C. Arthur, MC, USN

Change of Command for Navy Medicine

Photo by Ellen Maurer

VADM Donald C. Arthur became the 35th Surgeon General of the Navy and Chief, Bureau of Medicine and Surgery, in a ceremony on 4 August 2004 at the Washington Navy Yard. Previously, VADM Arthur was Commander, National Naval Medical Center, Bethesda. MD.

A native of Northampton, MA, he entered naval service in 1974 and attained his Doctor of Medicine degree from the College of Medicine and Dentistry of New Jersey. After a surgical internship, he completed Navy training in flight surgery and undersea medicine.

Dr. Arthur's early naval service includes research in mixed gas saturation diving and cold weather medicine. He served in the Philippines as both a flight surgeon and diving medical officer, followed by duty as senior medical officer aboard USS *Kitty Hawk* (CV-63). He completed his residency in emergency medicine and served as head of emergency medicine at Naval Hospital San Diego. At the Naval Aerospace Medical Institute, he was head of the special products division.

Following deployment to Southwest Asia with the Marine Corps Second Medical Battalion during Desert Shield/Storm, he served as Director of Medical Programs for the Marine Corps at Marine Corps Headquarters, Washington, DC. He then served as deputy commander of Naval Medical Center, San Diego, CA, and, subsequently, as commanding officer of Naval Hospital Camp Lejeune, NC.

In 1998, Dr. Arthur returned to Washington, DC, to serve as Assistant Chief for Health Care Operations, Bureau of Medicine and Surgery. He then held the positions of Deputy Surgeon General, Vice Chief, Bureau of Medicine and Surgery, and Chief of the Navy Medical Corps.

Dr. Arthur's operational qualifications include surface warfare medical department officer, saturation diving medical officer, hyperbaric (recompression) facility operator, radiation health officer, Navy-Marine Corps parachutist and jumpmaster. He is also qualified in submarines.

Dr. Arthur is board certified in emergency medicine and preventive medicine (Aerospace) and is a Certified Healthcare Executive and Fellow in the American College of Healthcare Executives. He is a Fellow and Past President of the Aerospace Medical Association and member of the Alpha Omega Alpha Honor Medical Society. He was the 2002 recipient of the American College of Healthcare Executives' Federal Excellence in Healthcare Leadership Award, and the 2002 Association of Military Surgeons of the U.S. Outstanding Federal Healthcare Executive Award.

VADM Arthur has been awarded the Navy Distinguished Service Medal, four Legions of Merit, three Meritorious Service Medals, three Navy Commendation Medals, and a Navy and Marine Corps Achievement Medal in addition to unit, service, and campaign awards. ❑

A New Device Trains Aviators to Recognize Hypoxia

A new device to train aviators to recognize the signs and symptoms of hypoxia offers a safer and more realistic environment for crewmembers to learn proper emergency procedures.

Hypoxia, insufficient oxygen to the brain, occurs rapidly at high altitude. In the past 2 years, Naval aviation has experienced more than a dozen in-flight hypoxia incidents, one of which resulted in the death of the pilot and the loss of an aircraft.

"Most hypoxia incidents during flights result from oxygen system malfunctions, loss of cabin pressurization, and other equipment failures," said LCDR Mike Prevost, aerospace physiologist and director of safety and standardization at the Naval Survival Training Institute. "Hypoxia affects every person differently. The only way to determine how an individual will react under hypoxic conditions is to go through the actual experience."

Recently, researchers from the Naval Aerospace Medical Research Laboratory (NAMRL) successfully completed testing on the Reduced Oxygen Breathing Device (ROBD), a system they developed. The ROBD duplicates the hypoxia experience in a normal room at ground level using a standard aviation mask and a software program that adds nitrogen to room air, explained Prevost.

NAMRL transitioned the ROBD to the Naval Survival Training Institute in November 2003 and incorporated it into the training program during the spring of 2004. The new curriculum is scheduled for release at selected survival training centers on the East and West Coasts.

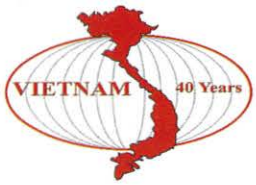
For more than 50 years, aerospace physiologists and technicians have provided hypoxia training to Navy and Marine Corps aviators. The current training uses a lower pressure chamber to simulate an altitude of 25,000 feet. While in the chamber, aviators remove their oxygen masks for 4 minutes and experience hypoxic symptoms, which include everything from euphoria, lightheadedness, and visual disturbances to muscle twitching, mental confusion, and cyanosis (bluing of the skin, prevalent around the nose, mouth, and fingertips).

"Hypoxia training in an altitude chamber does have its drawbacks. Namely, the training environment is a bit unrealistic and there are numerous medical risks including decompression sickness (DCS) and barotraumas (damage to the ears and sinuses caused by the change in pressure)," added LT Anthony Artino, director of human performance and training technology at the Naval Survival Training Institute.

"Using the ROBD may be more effective training for aviators. The advantages are numerous and include the ability to induce hypoxia with no risk of DCS or barotraumas and the ability to operate the device almost anywhere, including inside a fleet simulator," said Artino.

Ultimately, the Naval Survival Training Institute hopes to provide better, more realistic training by using a combination of the altitude chamber and the ROBD. They intend to take full advantage of the chamber's proven success as a training device while supplementing that training with the ROBD's portability, flexibility, and enhanced realism to help move Naval aviation survival training into the next century. ❑

—Story by Doris M. Ryan, Public Affairs Officer (M00P1), Bureau of Medicine and Surgery, Washington, DC.



Charlie Med A Physician's Journal

CAPT William B. Mahaffey, MC, USN (Ret.)

Part III

All work and no play is said to make Jack a dull boy. Charlie Med had its many protracted, incredibly busy periods. There were also occasional prolonged lulls on the battlefront during which we received few or no casualties over a period of several days. The forms of recreation available to us during those lulls were numerous.

First, there were R&R or Rest and Relaxation, though it was occasionally renamed I&I or Intoxication and Intercourse by lecherous Marines. A tour in Vietnam with the Marines never included a full weekend off or a true holiday routine. So, during a standard 13-month tour, every American stationed in Vietnam was, at least in theory, entitled to two 5-day R&R trips that were not charged as leave. These R&R trips were operated to Bangkok, Thailand, Taipei, Taiwan, Singapore, Tokyo, Japan, and occasionally to Hong Kong and Sydney, Australia. A few married men, possibly in positions where there were strings to be pulled, were privileged to enjoy 5 days with their spouses in Hawaii, though the spouse had to arrange her own travel to Hawaii. In 1966, the majority of the R&R trips in Southeast Asia were on DC-6B aircraft operated by the esteemed Pan American World Airways. In-flight services on these flights were provided by what we then called stewardesses. These ladies were usually rather dour, matronly stewardesses with decades of accrued longevity with Pan Am, who considered it a privilege to work these R&R flights. They provided a welcome level of service that has long disappeared completely from the main cabin of today's airliners.

Fortunately for Marines in the rear echelons and, of course, for us at Charlie Med, there were occasionally, at the last minute, unfilled spaces on these flights which were offered up to any taker via the chains of command. Only during quiet periods on the battlefront when our fluctuating personnel resources were on the plush side did our commanding officer permit any of us to take advantage of these unfilled seats. And there were also many busy periods when some of our personnel were denied the opportunity to enjoy a planned R&R trip on which they were already manifested.

I was fortunate in being able to enjoy three R&R trips, the first of which was to Singapore after I had been in Vietnam for about 5 months. Upon arrival in Singapore, we were offered a cold Tiger beer while being briefed on the island nation of Singapore. We were then transported to contract hotels where two men were assigned to two-bedded rooms for which Uncle Sam picked up the tab. This arrangement was economically advantageous for the government, of course, but it also may have stifled the amorous endeavors of some of the servicemen. Others claimed they took that hurdle in stride in various creative ways.

I couldn't imagine a more exotic place to visit than Singapore. Its name was synonymous with foreign intrigue. Right downtown near Change Alley was the venerable and prestigious Raffles Hotel landscaped with many fan-shaped Travelers palms. The Raffles was certainly not one of the less expensive designated

R&R hotels! Two Marine officers and I enjoyed dinner one evening at The Raffles, in khakis to meet their dress code. The fine meal was served not on stainless steel mess gear but on actual china plates. But first we visited the lounge. What other drink would I want in Singapore but a Singapore Sling? It was refreshing, but I later learned that it was not high on the list of drinks enjoyed by tough men.

Trips to local attractions such as Haw Par Villa and Tiger Balm Gardens were arranged for those who had a sightseeing bent, but I was fascinated by the chance to join an excursion to the Sultanate of Johore Baru, the southernmost state in Malaysia just across the straits from Singapore. There was little to do in "JB" but to see the Sultan's palace from a distance and visit a rubber plantation, but this country bumpkin from Ohio had now visited a land ruled by a Sultan!

Our contract R&R hotel had a nice swimming pool where pool side movies were shown each evening. The last evening in Singapore, during a pool side conversation, one young Marine chose to describe his recent amorous adventures to me, all of which added immensely to my life's education.

Then it was back to Danang, very much refreshed.

About 3 months later, I was able to make an R&R trip to Bangkok. Accommodations in double rooms were similar to those in Singapore, but we had an odd number of men in this group. The Marine officers decided that "Doc" should have the private room. Sightseeing and shopping opportunities were different in Thailand. Buying a bronzeware table service set, a cinnabar vase of red lacquer, or a star sapphire ring was expected of anyone on R&R. The bronzeware was popular and could always be resold back at Charlie Med. At the time, owning Chinese jade in the States was allegedly forbidden, but I bought a small jade dragon in Bangkok since I had been assured that it was "not Chinese."

We were offered bus trips to visit the many Buddhist temples of Bangkok and boat trips on Bangkok's bustling klongs or canals that were crammed with markets and houseboats. My one out-of-town organized excursion from Bangkok was to Kanchanaburi, a small Thai town at the east end of the historic railroad bridge made famous in the movie "Bridge on the River Kwai." We were allowed to set foot on the bridge and pose for photographs, but since it was an international bridge on the route into Burma, we could not cross it. On the last night in Thailand, an organized excursion included a delicious exotic Thai meal served on a floor-level table and a visit to a Thai boxing match where scrappy Thai boxers punched with their bare feet as well as with the gloved fists. Last on the schedule was a quick visit to a bar for nightcaps where we were permitted to look through one-way mirrors into a room where available ladies of the night chatted patiently on numbered chairs while waiting to be selected by an escort.

My final 5 weeks in Vietnam were at Dong Ha near the DMZ with Delta Med, but just before that transfer, I was surprised to be offered the last-minute opportunity to take an R&R trip to Taipei. This was indeed a fascinating trip, but less exotic than my first two R&R trips. A bright red luxury hotel on a hilltop dominated the landscape, but for the most part Taipei was a city of cool gray skies, gray concrete buildings and fewer things to buy. Excursions to Taipei's environs were also less exciting, but I did get to the inclined railway at Grass Mountain and the nearby overly commercialized aboriginal reservation at Oo-Lai. A group of us enjoyed a delicious meal at a genuine Mongolian Barbeque one night before returning to Vietnam.

Back at Charlie Med, a very diverse group of men found many ways to divert their attention away from the war. Evening movies in the Officer's and Enlisted Clubs, primitive as the clubs were, were a regular feature during quiet periods. Strangely, the Officer's Club had been one of the first hardback structures built and was functional when I arrived. A simple jukebox eventually arrived with only one 45-rpm record at first, Barbra Streisand's "Second Hand Rose." Thinking back, I believe that the O-Club served another unintended purpose. I insist that a remarkably good attitude prevailed among us about our work at Charlie Med. Spirits normally remained quite high. Complaints were few. We were too stunned to be depressed. I believe, however, that the Club offered us a setting where we could form our own unofficial support group in which we could somehow ventilate. Without really talking shop, we could express our concerns, frustrations, and reactions relating to the absolutely hideous and mind-boggling sights we encountered daily while attending to the flow of casualties. At least we discovered that we were not alone in our reactions to seeing so many young American men slaughtered.

During the summer, we built a simple volleyball court near the O-Club. It was a great place to blow off steam. Soon after USS *Repose* (AH-16) arrived in Danang Harbor in 1966, during a quiet period with fair weather, we invited a group of nurses from the hospital ship in for an afternoon of volleyball and socializing, followed by a barbecue of sorts. I recall that the nurses brought along an assortment

of refreshingly delicate pastries from the ship's galley which compared favorably to the dense, heavily frosted Marine spice cake we were accustomed to eating for dessert. The Marine helicopter pilots who had volunteered to ferry the nurses in for the afternoon were quite easily persuaded to stay and join in on the simple festivities.

We naturally assumed that the forthcoming influx of a bevy female nurses would demand that our restroom facilities be spruced up for the occasion. So, the unprotected piss tube nearest to Officer Country was covered with a barrel, and the officers' four-hole shitter was formally "rigged for ladies" but only by placing an appropriate sign on the door. The enclosed and unlighted (but well ventilated) four-holer had no luxury features to speak of, and certainly no mirror, dispensers of necessities, or hand-washing facilities. Rolls of coarse Marine "toilet tissue" were scattered here and there to be reached for. There was nothing resembling a partition dividing the four-holer into stalls, which, of course, made lively conversations more feasible for the usual male occupants as they answered nature's call. Ladies are known for their curious habit of tiptoeing to powder rooms in pairs; however, careful surveillance that day by the nurses' male hosts revealed that the ladies' four-holer was never occupied by more than one nurse at a time.

A sense of humor at Charlie Med helped us maintain our sanity. A heavy hinged wooden lid covered each of four crude but functional openings of the officer's four-holer. One day, a piece of wide adhesive tape was found on each lid. In bold red letters, the four lids were labeled: Commanders, Lieutenant Commanders, Lieutenants, and Marines.

While on the subject of sanitation, there was an enclosed six-holed facility near the ambulatory patients' wards which was approached by a boardwalk. Diarrhea patients could reach it, often in the rain, carrying an IV bottle in one hand. That six-holer was apparently located too close to the helicopter pad. One day, the down draft from an approaching helicopter, combined with monsoon winds, blew the enclosure right off the six-holed facility. Fortunately, the six-holer was unoccupied at the time.

Many of us already had either hobbies or we developed new ones in Vietnam. It was natural that many of us were readers. Somewhere there was a small accumulation of uninteresting books that could not really qualify as a library. *Stars and Stripes*, the legendary newspaper printed for service men and women overseas brought news to us, but it also offered a mail-order service for books operating out of Japan and utilizing the APO system. I ordered several books to read at night. I was in Vietnam during the peak of the Heathkit phenomenon. From a Heathkit, one could build anything from a simple electronic toy to sophisticated Hi Fi equipment. During the unpredictable quiet periods in Vietnam, I built a short-wave receiver and an oscilloscope (which still works.) One general medical officer played a flute-like recorder. The Protestant chaplain organized a choir with a surgeon as a soloist. Several of the men had guitars. Large selections of high quality cameras made by Nikon and Canon in Japan were becoming available for a good price at the PX down the road. Many of us improved our skills as photographers. I accumulated a large collection of slides taken in the ORs and during triage. I have used these slides to good advantage, even in recent years, to enlighten unenlightened medical personnel on the realities of casualties in a combat zone.

Though I never mastered the game of chess, that game of strategy was quite popular during quiet periods. Jogging was just not very feasible be-

Photos courtesy of author

Sunbathing at Charlie Med, (left to right) Dr. Greg Cross (general surgeon and company commander), Dr. Dave Torpey (anesthesiologist), and Dr. Bon Knapp (general surgeon).

The infamous four-holer.

cause of our topography, but our volleyball court saw much use. The Marines had their own small outdoor gym.

Armed Forces Radio & Television (AFRT) offered a radio network with some news and contemporary music. I recall later that we had a monochrome TV in the Club, but I don't recall watching it even once. Incoming mail was a lifeline with home. Letters from anyone at all in the States were appreciated. Our outgoing personal mail from a combat zone was mailed without having to pay postage. We had only to write "Free" where the stamp would normally be placed.

I wrote home the day after Christmas for the first time after I arrived in country. With unbelievably little delay I received a large coffee can filled with delicious Christmas cookies and candy, and the electrical extension cord I had requested in my first letter.

Organ playing in a combat zone may not qualify as recreation, but it served that purpose for me. I had some limited experience at playing a church organ when I was younger. CDR Paul Lionberger, a Lutheran chaplain in Vietnam, had a small foot-powered field model reed organ, but no organist. On several occasions I joined him during quiet periods and provided some music for his Communion services he conducted at line outfits lacking a chaplain.

Wherever Navy and Marine personnel are stationed around the world, the chance to visit the Navy Exchange or PX (Post Exchange) or BX (Base Exchange) is always a highlight. The first BX in Vietnam that I remember was just a simple tent in the Division Headquarters area. It sold some common toiletries, grunt stationery, and a few cameras and radios. Eventually a much larger BX was constructed along the road to Danang in a complex that included the USO and American Red Cross. It was a barn-like structure with only a few things available at first on its sales floor. I remember being able to buy marinated artichokes and Borden's Eagle Brand condensed milk, but no instant coffee or Dial soap. They did carry canned Spam, as if we needed it. Eventually, their stock of Nikon and Canon cameras and camera accessories grew very large. There was also an ever-changing assortment of souvenir items from Southeast Asia such as Batik and rice straw paintings. The BX was a couple of miles down the road from us, but a pedestrian on the dirt road could count on being offered a ride, especially in bad weather. Umbrellas are most definitely not a part of Marine's belongings.

In December 1965, the acclaimed Bob Hope show came to Danang; however, since I was the newest of the anesthesiologists on board, it was my duty to remain back at Charlie Med to provide coverage with other newer members while several of our team with more longevity in Vietnam took in the Bob Hope show. That was only fair!

These were the days before satellite communications and cell phones. From R&R destinations, we could use expensive commercial phone lines to call home, but not from Vietnam. Here, the MARS (Military Amateur Radio System) allowed occasional links with home. The MARS operator in Vietnam would try to contact an amateur radio operator in the States who would then patch the caller through to their home via a collect phone call. It was a noble effort, but amateur radio transmission was feasible only at odd hours and, even when the connection was successful, the conversation was hampered by constant fading and static. (To be continued.) ❑

Dr. Mahaffey is retired and resides in Upper Sandusky, OH.

Reducing Unplanned Pregnancy Among Active Duty Sailors

Michael R. MacDonald, MS, CHES, CEHT
CAPT Bruce K. Bohnker, MC, USN(FS)

Unplanned pregnancies among active duty Sailors continue to be of concern. In 2001, 10 percent of young (E-2 through E-4) female Sailors became pregnant.(1) Of all pregnancies among surveyed enlisted female Sailors during that year, only one of three (36 percent) was planned. In 2002, this rate improved to 45 percent.(2) The national *Healthy People 2010* objective is to increase the proportion of pregnancies that are intended to 70 percent.(3) Planned pregnancy rates among surveyed active duty Navy enlisted women in 1988, 1992, 1997, 1999, 2001 and 2002 are shown in Figure 1.

Navy women who become pregnant often report the father to be another military member. In 2001, 67 percent of surveyed Navy enlisted women who became pregnant reported the father was a military man (58 percent Navy men), and about half of the enlisted female Sailors that experienced an unplanned pregnancy were unmarried (49 percent). The vast majority (81 percent) of men who fathered the children of unmarried Sailors in 1999 were military men.(4)

A significant proportion of those children are born to single parents. Among male enlisted Sailors, one of four who became fathers in 2001 was unmarried. Of female parents Navy-wide, 24 percent were single in 2001. Of male Navy parents in 2001, 6 percent were single. Fully 7 percent of all Navy women in 2001 were single parents, as were 3 percent of all Navy men.(1) In 2002, there were over 5,000 single Navy mothers and over 10,000 single Navy fathers(2) which may impact deployment readiness.

Impact

Pregnancy and parenthood are compatible with a military career. The authors are aware of no study that demonstrates a negative impact of pregnancy, per se, on the readiness of the Navy. However, based on the challenges of single parenthood and its effect on Americans in general(5), it is safe to state in general terms that an unplanned pregnancy may adversely impact the pregnant Sailor, the father, the child, and, thereby, the Navy.

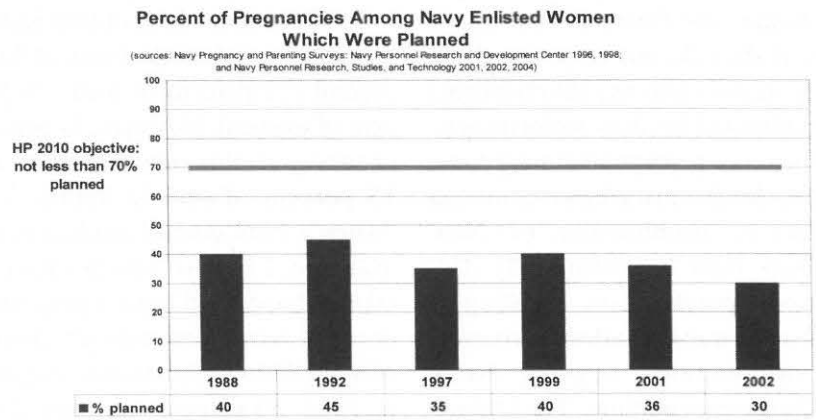


Figure 1

Among the general population, the Institutes of Medicine found the most obvious adverse consequence of unintended pregnancy is that roughly half end in abortion. Other social consequences associated with unplanned pregnancy in the general U.S. population (though difficult to separate from the effects of income, education, and maternal health) may include low birth weight babies, developmental problems among unwanted children, and child abuse or child neglect.(*5*)

Clearly, the Sailor experiencing an unplanned pregnancy is suddenly confronted with important decisions that may entail significant changes to his or her life plans. The stresses of single parenthood are physical, emotional, and financial. Single parents, both male and female, are uniquely challenged by the competing requirements of parenthood and work. Deployment childcare is also a challenge for young single parents. In 2001, nearly half (46 percent) of female enlisted single parents said they plan to move their children in the case of a deployment(*1*) While deployments and family separations are always stressful, this uprooting may make deployments especially difficult for the single parent and his or her children. Military men who father children out of wedlock may be confronted with significant legal, emotional, and financial challenges, even if they do not raise the child. These stresses may negatively impact the Sailor and his duty performance.

There is a perception among some military leaders that pregnancy among Sailors is "problematic."(*4*) New mothers may be voluntarily discharged from the Navy, resulting in the loss of trained Sailors. Certainly, all pregnancies require Navy healthcare expenditures. The Department of Health and Human Services has estimated the pregnancy care cost for one woman who does not intend to be pregnant, yet is sexually active and uses no contraception, to be about "$3,200 annually in a managed care setting."(*3*) Costs also include reduced duty hours during pregnancy, and absence from the workplace during delivery and convalescence. In the case of unplanned pregnancies, these costs may be avoidable. Additionally, the Navy leadership has appropriately required evaluation of the workplace of pregnant Sailors. This may lead to temporary reassignments to other duties if the workplace is considered hazardous to the Sailor or her fetus. Hence, the Sailor loses on-the-job experience, while the Navy temporarily loses the service of a skilled Sailor. Navy policy also reassigns Sailors off ships before the 20th week of gestation. In 2001, most (56 percent) were transferred earlier.(*1*) These scenarios may leave a command under-staffed until a replacement arrives. In FY03, 12 percent of enlisted females on "sea duty" became pregnant (as did 14 percent on "shore duty").(2) Work centers may also be affected by single parent workers due to the need to accommodate family emergencies and unforeseen childcare situations.

Attitudes About Birth Control

In 2002, about three of four Sailors "usually" used some form of birth control (71 percent of men, 75 percent of women). However, 31 percent of surveyed male enlisted Sailors and 15 percent of female Sailors said "when a birth control method is not available, I believe you just have to take a chance and hope a pregnancy does not occur." Interestingly, among enlisted Sailors who became pregnant in 2002, 50 percent were <u>not</u> using birth control.(2) Of those enlisted members who were using birth control but became pregnant in 1999, oral contraceptives were most commonly reported to have been used. (59 percent).(*4*)

In 1997, Sailors who had an unplanned pregnancy but were not using any form of contraception were asked why they did not use birth control. Their answers included "because withdrawal or the rhythm method works well enough" (29 percent), and "I am not sexually active" (24 percent).(*6*)

Data from the *2002 Department of Defense (DOD) Survey of Health Related Behaviors Among Military Personnel* indicate that only half (49 percent) of unmarried male Sailors and only one-third (36 percent) of unmarried female Sailors said a condom was used at last sexual intercourse.(7) The national *Healthy People 2010* objective is not less than 50 percent.(*3*)

Education

Over 95 percent of surveyed enlisted Sailors in 2001 stated they had received "training about birth control" during their Navy career.(*1*) Responsible sexual behavior in general and birth control and parenting in particular are typically included in "all hands" lectures presented at the Recruit Training Center in Great Lakes and are provided to commands Navy-wide as part of General Military Training (GMT). However, in 2002, only 3 percent of enlisted women Sailors and only 4 percent of enlisted men say they have seen the comprehensive film regarding unplanned pregnancy developed by the Navy entitled *Responsible Parenting – Give Yourself a Chance*.(*2*) "Choices"(*8*), a multi-day training program that includes the requirement for Sailors to care of an infant simulator (developed at Naval Station Sigonella) has shown some evidence of effective-

ness and has been tried at other Navy locations.

Knowledge of birth control among Sailors is high and attitudes are generally positive, but there are some misconceptions. For example, in 2002, only 71 percent of enlisted women and 39 percent of enlisted men were aware of emergency contraception, and only 23 percent of enlisted women and 10 percent of enlisted men believed emergency contraception was available where they were stationed.(*2*)

In 2001, well over half of enlisted men (63 percent) and enlisted women (55 percent) agreed with the false statement "condoms are as effective as the pill in preventing pregnancy."(*2*) These Sailors were not aware that "typical use" of condoms has a pregnancy prevention failure rate of 14 percent, while the pill has a "typical use" failure rate of only 5 percent.(*9*) Another misconception involves birth control pills. Most enlisted men (66 percent) did not agree with the statement "if a woman misses two of more pills in a row, she must use an additional method of birth control along with the pill for the remainder of the month to be safe."(*1*) These Sailors were unaware that an alternative birth control is recommended when consecutive pills have been missed.(*9*) Still another misconception regards weight gain. In 2001, almost one of three enlisted women (30 percent) believed that "almost all women who take the birth control pill gain weight."(1) These Sailors may have been unaware that weight changes occur in only a small proportion of women who start oral contraceptives, and the changes are minimal.(*9*)

These data suggest the following "all hands" education messages (worded to suit target audiences) may be beneficial:

Suggested "All Hands" Education Messages
When a birth control method is not available, it is very risky to "take a chance and hope a pregnancy does not occur."
Women who do not use any form of contraception because they are "not sexually active" should: a. think about and plan how they will maintain their plan of abstinence in the presence of pressure to have sex b. if circumstances change and she decides to have sex, plan for and insist on the correct and consistent use of a latex condum c. consider discussing birth control with her healthcare provider before having sex d. consider promptly discussing emergency contraception with her healthcare provider if her abstinence plan fai fails and she had sex without any form of birth control
Concerns of weight gain need not inhibit a woman from using oral contraception. Some women gain weight and some lose weight when taking birth control. A woman's healthcare provider may adjust birth control prescriptions in response to weight gain concerns.
A woman who is on the pill is less protected from pregnancy if she misses 2 pills during the month.
Emergency contraception pills (ECP) can reduce the chance of pregnancy by 75 percent if taken within 72 hours of the event; and ECP are available at every Navy clinic and hopsital. Women who are concerned about the effectiveness of their current birth control method to prevent pregnancy due to a recent (within 72 hours) sexual encounter should promptly see a doctor.
Condoms are not as effective as birth control (BC) pills in preventing pregnancy.
BC pills and other chemical contracptives do not prevent the transmission of HIV and other sexually transmitted infections. The correct and consistent use of latex condoms significantly reduces th the risk of HIV transmission and reduces the risk of acquiring or transmitting other STIs. For people whoe choose to have sex, but seek to avoid pregnance and infection, chemcial contraceptive and condoms, used together, significantly reduce risk.

Healthcare

Access to contraceptives, including emergency contraception pills, for Sailors is free and generally convenient. However, in 2001, about one of three surveyed Sailors (male and female) said they would be uncomfortable discussing contraception with their onboard medical personnel.(*1*)

Navy policy directs healthcare providers to discuss contraception, including emergency contraception, during each annual women's health exam.(*10*) This requirement is further supported by the Navy's Preventive Health Assessment (PHA) counseling

guidelines.(*11*) However, in 1999, one of three (34 percent) female Sailors said their healthcare provider did not discuss contraception during their last physical exam (within the past year). Less than half (42 percent) said their healthcare provider discussed sexually transmitted diseases, and only one of ten (10 percent) say they discussed emergency contraception.(*4*) And, as previously stated, knowledge levels among Sailors about emergency contraception appears low.

These data suggest that information messages in the topics in tables 1 and 2 following topics be developed for Navy medical professionals.

Unintended pregnancies among active duty Sailors occur in significant numbers and at rates that fall short of the national objective. The consequences of unintended pregnancy, including single parenthood, may negatively affect Sailors, their children, and the Navy. Some unintended pregnancies may be avoidable. The Navy parenting and pregnancy surveys provide clues to misconceptions held by some Sailors. These clues, if used to craft educational messages for Sailors and Navy medical professionals, and if used in "all hands" training and patient education, may help reduce the incidence of unplanned pregnancy among the active duty force.

References

1. Uriell, Z. (2001). Pregnancy and Parenthood: Results of the 2001 Survey. Navy Personnel Command, Millington, TN, (unpublished, PowerPoint briefing, 5 Oct 2001)

2. Uriell, Z. (2004). Results of the 2003 Pregnancy and Parenthood Survey. Navy Personnel Research, Studies, & Technology, Millington TN, (unpublished PowerPoint briefing, 5 April 2004 and e-mail communication with the author, 9 April 2004)

3. U.S. Department of Health and Human Services (2002). *Healthy People 2010: Understanding and Improving Health.* 2nd ed. U.S. Government Printing Office, Washington, DC. 2000. http://www.healthypeople.gov/

4. Thomas P, Mottern J. (2002). Results of the 1999 Survey of Pregnancy and Single Parenthood in the Navy (NPRST-TN-03-02). Navy Personnel Command, Millington TN

5. Institutes of Medicine. The Best Intentions. Unintended Pregnancy and the Well Being of Children and Families. National Academy Press, Washington, DC. 1995.

6. Thomas P, Uriell Z. (1998). Pregnancy and Single Parenthood in the Navy: Results of a 1997 Survey (TR-98-6). Navy Personnel Research and Development Center, San Diego, CA

7. Bray RM, Robert M. 2002 Department of Defense (DOD) Survey of Health Related Behaviors among Military Personnel. Prepared for the Assistant Secretary of Defense (Health Affairs) under Cooperative Agreement No. DAMD17–00–2–0057 by RTI International, Research Triangle Park, NC. 2004.

8. Hughes T, Staren-Doby D. (2003). Reducing unintended pregnancy in young, single active duty women in an overseas environment. Mil Med. 2003;168 (1):11.

9. Hatcher R, Trussell J, Stewart F, Cates W, Stewart G, Guest F, Kowal D. *Contraceptive Technology*, 17th ed. Ardent Media, New York, NY. 1998.

10. *Manual of the Medical Department.* NAVMED P-117. pp. 15-69. Or online at http://www.vnh.org/Admin/MMD/001Contents.html

11. Preventive Health Assessment. OPNAVINST 6120.3, 5 December 2001, Department of the Navy. Or online at http://www.vnh.org/Admin/MMD/001Contents.html. ❑

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Suggested Topics: Information Messages for Navy Medical Professionals
Effectiveness, appropriate use, and availability of emergency contraception.
Requirement for, and potential benefit of, discussing contraception and emergency contraception with female Sailors annually.
Requirement for, and potential benefit of, assessing sexual risk behavior with all active duty members in conjunction with the annual preventive health assessment.
Free, online, ready-to-use materials are available to Navy healthcare professionals for use in patient education and "all hands" lectures (such as the Navy Environmental Health Center's Sexual Health and Responsibility Program (SHARP) at http://www-nehc.med.navy.mil/hp/sharp/pregnancy.htm
Education outreach by Navy medical professionals to their local non-medical commands (i.e., assisting with sexual health GMT) may be beneficial and welcomed.
Some patients say they are not comfortable speaking with onboard medical personnel about contraception therefore, ship and shore medical activities should thoughtfully consider the implications and appropriate response to this circumstance.

Hizbullah Healthcare
One of the Many Complex Sides to a Terrorist Organization

LCDR Youssef Aboul-Enein, MSC, USN

The global war on terrorism has changed the role of military medicine in many ways. Because of the need to wage a hearts and minds campaign, corpsmen, physicians, and healthcare providers engage in humanitarian healthcare as part of stabilization operations in Iraq and Afghanistan. What readers need to be aware of is that those organizations dedicated to undermining the United States also have their own healthcare units that are surprisingly sophisticated, integrated, and connected with several governments. In the world of Islamic militancy, the Lebanese Shiite group Hizbullah (Party of God) is perhaps the most innovative organization in the Middle East. The organization is worth studying not only from a counter-terrorism perspective but because its healthcare and social welfare system is truly extraordinary and designed to win over The Iranian Martyrs Foundation pays all medical expenses for Hizbullah fighters and a pro-rated amount of about 70 percent for civilians injured in combat operations. Since the first Hizbullah hospital, Rasul-Al-Azam, was built in 1983, similar hospitals have been constructed in south Lebanon, including a major facility in Baalbek (Hizbullah's capital in south Lebanon).

Hizbullah also operates 46 health clinics in south Lebanon and maintains mobile clinic capabilities. Where the Lebanese government failed to provide clean water to south Lebanon, Hizbullah's *Jihad-al-Binaa* (literally Reconstruction Effort—a Hizbullah construction wing) worked to provide the only source of drinking water to Dahiyah residents.*(2)* The same mobile clinics and 46 dispensaries and clinics in south Lebanon also serve as combat aid stations for combat fighters and victims of clashes with Israel, and other militias.

Beginning in 1988, Hizbullah went beyond providing armed bands, suicide bombers, and protection, and entered the Shiite slums of Dahiyeh to serve as that town's municipality. Their operatives assumed responsibility for garbage collection and to this day augment the Lebanese sanitation department by removing and spraying 300 tons of garbage a day from Dahiyah.*(3)*

Hizbullah operates a sophisticated welfare system with many organizations and functions.

The Relief Committee's primary aim is to enable Lebanese families to reach self-sufficiency. Licensed by the Lebanese government to construct clinics, hospitals, and centers for the physically disabled, the Committee also provides health education programs focusing on prevention.

The Health Committee oversees the 46 clinics and 3 major hospitals that Hizbullah operates (Dahiya, Jebaa, and Baalbek). It dispenses free pharmaceuticals in multiple dispensaries located throughout south Lebanon. In 1996 Hizbullah issued an electoral program as they competed for seats in parliament. Of its seven pledges to voters contained in the document, the fifth pledge is dedicated to healthcare and states:

"*Complete the task of improving public hospital and health clinics with the required equipment, spreading these health centers all over the country especially in remote areas and the steadfast and resisting areas in the South and West Bekaa (Valley), in addition to making health security accessible to all sectors of the Lebanese society."(4)*

The Islamic Health Society (IHS) is an Islamist medical NGO (non-governmental organization) formed in 1984 and focused on bringing healthcare to the impoverished areas neglected by the Lebanese government. It networks with the Lebanese Health Ministry, the World Health Organization, Arab Medical Societies, and UNICEF to deal with issues like immunizations. Its efforts are primarily in south Lebanon, and it receives funding from organizations that do not conflict with the policies of IHS (Iran, Syria, and the Gulf States), by charging nominal fees, and collecting a religious tithe.

The IHS provides extensive medical services. In the 2001-2002 school year it provided 7,110 medical screenings, treated 2,715 students on the spot, transferred 2,256 students for further medical care, and immunized 99,818 children. Their healthcare workers also trained 534 persons in first aid in 19 locations and conducted seminars on pediatrics, reproductive health, and common diseases indigenous to the Levant as well as anti-smoking drives. The IHS conducts blood drives on the 10th of Muharram, known as Ashura, a holiday on which observant Muslims practice self-mutilation, drawing their blood for the pain and suffering of Imam Hussein.*(5)*

Jihad al-Bina is the construction and engineering wing of Hizbullah. This Hizbullah organ aids farmers, digs wells, and takes on massive reconstruction projects. But it also provides combat engineers for Hizbullah's light infantry forces. From a healthcare perspective, the Saleh Ghandour Hospital in the Bekaa Valley (named after a suicide bomber who drove a car bomb into a squad of Israeli soldiers in 1995) provides a fascinating look into how Jihad-al-Bina took over a Lebanese government hospital and turned it into a working medical care facility. When Israeli Defense Forces and Lebanese Christian militia withdrew from south Lebanon in May 2000, Hizbullah took over this ransacked medical facility and began reconstructing it. With funds from Iran, Hizbullah spent $1.5 million to upgrade facilities. The organization took the medical facility out of the hands of the Lebanese government which had previously shown no interest in funding or maintaining it. It reopened in 2000, and 2 years later the facility contained a CT-scan, an ecograph department, and modern delivery suites.*(6)* Today it is a 42-bed facility that treats 250 people per day, charging 25 percent of the standard Lebanese government fees.*(7)*

How Healthcare Recruits Terrorists

In mid-2001, Hizbullah and the Iranian Revolutionary Guard Corps (IRGC) began a campaign to provide care to Palestinians wounded in the second Intifadah uprising. Hundreds of mildly to moderately wounded Palestinian terrorists were flown to Teheran for free medical care at military hospitals. As they recuperated, these battle-tested terrorists were treated as heroes and invited to events commemorating resistance against the Israelis. Many of the select fighters were then convinced to join Hizbullah. As a result, the Iranians created a ready pool of Palestinian terrorists with combat experience, who had demonstrated their commitment through their battle injuries.*(8)*

We are consistently reminded that the global war on terrorism is a hearts and minds campaign. Hizbullah already maintains a robust hearts and minds campaign in southern Lebanon. Since 1997, 190 Bekaa Valley villages have had access to credit, technical

assistance, and loans overseen by Jihad Al-Binaa engineers. In 1999 two social security funds served the needs of Bekaa Valley farmers who were neglected by the Lebanese government. These funds insure 4,800 families in over 115 villages. For the equivalent of 7 dollars a month, Hizbullah will defray the cost differential of hospitalization not covered by the Lebanese Health Ministry. Hizbullah has signed contracts with hospitals in southern Lebanon in which network participants enjoy a 30-50 percent discount for care rendered. Over 120 doctors in the south provide care at reduced cost as part of a Hizbullah health network.*(9)*

Conclusion

Although Hizbullah has made a socio-medical impact in Lebanon, the organization's intent is quite clear. The healthcare network has been created with the intent of propagating its agenda of establishing a Shiite theocracy in Lebanon that is anti-Israeli and anti-American.

It should be understood that Hizbullah, like all Islamic militant organizations, is not monolithic and others like Hamas have created a quasi-state with extensive social services. Islamic militant NGOs not only provide medical care for terrorists but also use this service extensively as a recruiting tool. As the United States pursues the war on terrorism, military planners must take into account the social-medical aspect of the struggle. If defeating organizations like Hizbullah depends on winning the hearts and minds of the people, we must learn to beat the enemy at their own game.

References

1. Norton, RA. *Hizballah: From Radicalism to Pragmatism*? Middle-East Policy Council on the internet http://www.mepc.org/norton58.htm.

2. Harik, Judith Palmer. *Hezbollah: The Changing Face of Terrorism.* New York: I. B. Tauris, 2004. pp. 83-84.

3. Ibid., p. 83.

4. *The Electoral Program of Hizbullah, 1996.* On the Hizbullah website Al-Mashriq/The Levant at http://almashriq.hiof.no/lebanon/300/320/324/324/hizballah/hizballah-platform.html.

5. The Islamic Health Society Webpage. Found in the consortium of Iranian and Lebanese Non Governmental webpage Al-Hayaa (Life) at http://www.hayaa.org.

6. Ibid.

7. Nicholas Blanford article entitled, "Lebanon's A-Team of Terrorists valued for Social Services." *Christian Science Monitor* May 19, 2003 edition at www.csmonitor.com/2003/0519/p07s01-wome.html.

8. Middle East Intelligence Bulletin (MEIB) Website New York report entitled, "*Hezbollah's West Bank Terror Network*" at www.meib.org/articles/0308_13.htm.

9. Harik, *Hezbollah: The Changing Face of Terrorism,* pp. 85-94. ❑

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BUMED Notice

On 1 March 1951, the first dental ensign company (so named Volunteer Dental Unit W-2) was activated at Georgetown University Dental School, Washington, DC. Shortly thereafter, other companies like it were organized at other dental schools in the United States. For about 20 years these companies operated like a dental ROTC, and served as a means of recruiting dental officers in the U.S. Navy.

If you were a graduate of one of these dental companies and/or have information about them please contact the Navy Medical Department, Office of the Historian, Bureau of Medicine and Surgery (M00H), 2300 E Street, NW, Washington, DC 20372-5300 or email A. Sobocinski, Assistant Historian, at ABSobocinski@us.med.navy.mil. This is a unique piece of history that needs to be documented.

Combat PTSD Treatment
Navy Reaches Out to Army

LT Mary Neal Vieten, MSC, USNR
LT D. Walter LaBrie, MSC, USNR
HM1 Donald Burke, USN
HM1 Paul Quijano, USN

In the summer of 2003 psychiatric casualties began to return from Operation Iraqi Freedom to Fort Buchanan in Puerto Rico and quickly overwhelmed the small medical clinic's capacity to care for their problems. Naval Hospital Roosevelt Roads (NHRR) was asked to assist, and even while "steaming" towards decommissioning, the command threw itself behind a plan for triage, treatment, and follow up of combat related Posttraumatic Stress Disorder (PTSD) patients from Iraq.

The NHRR psychologist was faced with a list of over 40 men and one woman who were identified as needing immediate care. Of these, 21 met full criteria for combat related PTSD. Some had left the theater of operations 4-10 weeks prior to triage at NHRR and their ability to cope psychologically was deteriorating rapidly without medical intervention. NHRR mental health clinic faced a unique challenge with only one licensed provider available to treat PTSD patients and 21 patients having a pressing need for treatment. The clinic believed some type of "mass intervention" should be employed. Within 24 hours a team of volunteer providers, leaders and translators was assembled. The idea of a retreat approach was developed and after two weeks of intensive "round-the-clock" planning and preparation, the plan was executed.

Photo by SSG Concepcion Gonzalez, USA

Retreat participants present the executive officer, CAPT C.O. Barker, MC, and LT Vieten, with a plaque expressing gratitude for the retreat and the effort made by Naval Hospital Roosevelt Roads.

Retreat participants were Army and National Guard soldiers ranging from 2 to 29 years of military (active and reserve) service, with an average of 14.5 years. They were military police, transportation specialists, and quartermasters, some of whom, had also served in Desert Storm, the

Persian Gulf War, Kosovo, Vietnam, and Granada as well as other peacekeeping or humanitarian missions.

The retreat involved 7-days of taps-to-reveille structured treatment and incorporated a broad spectrum of well known treatment interventions and modalities. The retreat was unique in pioneering a model for PTSD treatment developed and executed by a team consisting of military medicine professionals and PTSD patients, all experienced in PTSD care. This team identified eight pillars of PTSD treatment along with effective interventions for each pillar based on recommendations from PTSD literature and experience in the field. Each pillar is a "stand alone" unit equal in size and weight and can be presented in no particular order. Intervention elements, for example exercise, may support several pillars. Treatment consisted of eight pillars: Facing the Event, Avoiding Avoidance, Reducing Hyperarousal, Spiritual/ Existential, Care of the Body, Social Support, Psycho-education, and Lowering Expectations (see Table I).

A standard operating procedure (SOP) was developed (available upon request). Retreat plans included arrangements for lodging, meals, sick call, safety, 24-hour staffing, supplies and equipment, translators, recreation, physical training, presentations and funding. Every effort was made to reduce distractions, create an environment of wellness and ensure participant safety. Several of the participants were injured in Iraq and had problems with mobility. For their safety and to ensure goals were met, the retreat was held at the Naval Station's Combined Bachelor's Quarters (CBQ) facility where rooming, meeting rooms, dining facility and a lovely tropical setting were combined. A list of "ground rules" was presented to each participant. These included no military bashing, no Fort Buchanan bashing, no weapons, no knives, no pornography, no alcohol or illicit drugs, no visitors, no leaving without staff knowledge, no cell phones or pagers during presentations or sessions. It is noteworthy that during the 7 days there were zero infractions of the rules. Because many of the participants were limited in their use of English, there were two translators on board at all times and all presentations were translated upon request. This ensured maximum understanding and participation. Each participant received relevant literature on PTSD and related topics. Whenever possible this information was also provided in Spanish.

On Sunday afternoon the participants arrived. They received an orientation, a module on wellness and a rationale for the inflexible routine planned for the up coming week. The chief's mess provided a welcome dinner, followed by staff addressing the usual myriad of individual concerns. The next day, immediately following breakfast, the NHRR commanding officer, formally opened the retreat and welcomed the participants.

The retreat emphasized wellness in several ways. Daily physical training (PT) was mandatory. Service members were divided into groups based on physical restrictions, but everyone was able to participate in some type of activity at some level of effort. Command fitness representatives supervised PT. Patients received three square meals per day. The expectation was that participants were to sit down and eat together in a relaxed environment. Although sleep comes begrudgingly to PTSD patients the rule was "lights out" at 2200. Participants noted at least some improvement in sleep over a week of strict routine, combined with other methods of arousal reduction. Consumption of caffeine and the use of nicotine were discouraged. Anyone requesting assistance to quit smoking received special assistance. Corpsmen were available at all times for medical care requests as well as formally during sick call each day.

Mental health professionals, chaplains, substance abuse counselors, and trained peers were available to participants throughout the week. They were encouraged to network and become a support to one another during the week and beyond. Daily group and individual sessions, including pastoral counseling if requested, were provided. A memorial service was offered midweek to remember several unit members who had been killed in Iraq. Invited presentations, taught by subject matter experts, included Posttraumatic Stress Disorder (military history, symptoms, treatment), wellness, nutrition, Servant Leadership, spirituality, bereavement, pharmacotherapy, relaxation techniques, anger/aggression management, the spouse's perspective, tobacco cessation and substance abuse. Opportunities for recreation in the evenings included a domino tournament, bowling, and a movie night (see Table II). On the final night of the retreat staff treated participants with a "Welcome Home" dinner. Students at the Roosevelt Roads Elementary School decorated the dining room with posters and letters of encouragement. Participants were joined by the NHRR CO and XO and other hospital staff who mingled with the soldiers and offered words of encouragement.

On the last morning of the retreat the First Class Association prepared breakfast for the participants. Following the breakfast and the inevitable completion of course evaluation forms, an informal graduation ceremony was

conducted. Participants were presented with certificates of completion by the XO and he gave the closing remarks. Much to the staff's surprise the participants presented NHRR with a plaque expressing gratitude for the retreat and the effort made by NHRR. Finally, in a deeply touching display of respect for NHRR and appreciation for what they had received, the participants closed the retreat by coming to attention and saluting the XO and the retreat staff.

The outcome questionnaire (OQ) was used to collect data to assess the effectiveness of the retreat format in treating PTSD symptoms. Data was collected on Saturday evening and again on Sunday morning. Overall, patients reported a nearly 20 percent reduction in symptoms over the 7-day retreat. Patient satisfaction was assessed using a course critique format that questioned participants about the retreat as a whole and about each specific training module. Participants rated the retreat as 5.94 on a six-point scale. Following the retreat a detailed summary of action was compiled and submitted to the commanding officer. Participants were subsequently integrated into the ongoing Combat PTSD clinic at NHRR for follow up treatment and support. ❑

PTSD Treatment Pillars

Facing the Event	Avoid Avoidance	Reduce Hyper-arousal	Spiritual/ Existential	Care of the Body	Social Support	Psycho-education	Lower Expectation
• Therapy • Talking • Grief • Confession	• Re-engage • Desensitize in a safe environment • Stop cycle of increasing avoidance • Group • Talk about it • Manage panic sxs	• Exercise • Relaxation techniques • Psychopharm • Aggression management • Recognize "addiction" to hyper-arousal	• Confession • Worship • Memorials • Rituals • Pastoral counseling or guidance	• Smoking • Excessive alcohol use • Poor diet • Sleep hygiene • Psychopharm	• Exclusive therapy or support groups • Good leadership • Spouse • Social Activities • Religious congregation	• Know more than your provider • Military & PTSD • Behavioral interventions • Treatments • Symptoms • Prognosis • Spouses	• Prognosis • Time to improve • Be realistic • Can't turn the clock back • Spouses • "Shoulds"

Table I - The examples provided under each pillar should be viewed as a non-exhaustive list.

Table II Sample of PTSD Daily Schedule	
0600-0800	SFC holds formation in Spanish, PT, showers, etc.
0800-0815	Sick Call
0800-0900	Breakfast
0915-1045	Group
1100-1200	Guest speaker/ educational module
1200-1315	Lunch
1330-1430	Module
1445-1745	Film with discussion/ module
1800-1900	Dinner
1900-2130	Office hours/ 1:1/ sick call/ planned recreation or module/ pastoral counseling
2130-2200	Free (on premises, no visitors)
2200	Lights out

LT Vieten is Head of Mental Health at Naval Medical Clinic, Patuxent River, MD.

LT LaBrie is psychologist aboard USS *Harry S. Truman*.

HM1 Burke is psychiatric technician at Naval Hospital Jacksonville, FL.

HM1 Quijano is an instruction at Naval Hospital Corps School, Great Lakes, IL.

Photos from BUMED Archives

Dr. Julius Amberson (facing camera) and his comrades Dr. T.A. Dooley (left), PHC A.B. Cory, and LT E.H. Gleason work on a purification unit water pump at the La Pagode Refugee camp near Haiphong.

Operation Passage to Freedom

A full decade before the United States became embroiled in the Vietnam War, French colonial rule in Indochina came to a chaotic end. France hastily began withdrawing its forces in May 1954, following a climactic defeat at Dienbienphu, the garrison overrun by the Vietminh. The Geneva Accords of 1954 called for a cease-fire between French and Vietminh forces, ending hostilities in Vietnam, Cambodia, and Laos. The provisions also provided for the temporary division of Vietnam along the 17th Parallel, pending a nationwide election to be held in 1956. Meanwhile, French forces were to withdraw from the north, and the Vietminh from the south. Under the Geneva terms, the people of Vietnam could decide where they wished to settle. Few in the south chose to go north, but with the collapse of French rule, hundreds of thousands of refugees streamed south to escape communist rule. As with the humanitarian mission in evacuating the survivors of Dienbienphu, the U.S. Navy was also charged with conducting "Operation Passage to Freedom." By the time the mission was completed, Navy ships evacuated to South Vietnam more than 860,000 refugees, almost 500,000 of them Catholics.

CAPT Julius Amberson, MC, USN, was the medical officer in charge of "Operation Passage to Freedom." In a 1955 lecture presented at the U.S. Naval Medical School, Dr. Amberson reminisced about his role in this extraordinary mission.

We reprint this address published in the January-February/March-April 1989 issue of Navy Medicine as part of the 40th anniversary of the Vietnam War series.

Symbols of the great migration to South Vietnam.

Early in August 1954, the Com mander of Naval Forces Far East received orders from Washing-ton to mobilize a naval task force for the purpose of evacuating refugees from northern Vietnam to designated places of safety in southern Vietnam. The communists under the Vietminh leader, Ho Chi Minh, had just broken the back of French resistance after seven years of war. Dienbienphu was their Waterloo.

By the Geneva agreement there was a "provisional military line of demarcation" at the 17th parallel by which the commanders in chief of the Vietminh forces on the north and Vietnam forces on the south were placed in charge of civil administration and relief on their respective sides of the line. Provision was also made for a small area around Haiphong for withdrawal of the French from the interior. All refugees were to congregate also at Haiphong for evacuation.

Naval Task Force 90, commanded by RADM L.S. Sabin, was dispatched to Vietnam to assist the French in the evacuation of both civilian and military personnel as well as all military equipment which might be brought to the beaches and docks at Haiphong. Certainly the French forces deserve outstanding praise and credit for their efforts in this successful evacuation designated as the "Passage to Freedom."

The mission of the Medical Department was set forth succinctly in the medical annex of the operation order for this task force. In effect it said we would maintain sanitary conditions throughout each ship, prevent epidemics in our personnel, and provide humanitarian care and medical attention to the refugees as they came within the orbit of our operations, both ashore and afloat.

The task force began to assemble from various Pacific sectors in the vicinity of Haiphong about 15 August 1954. The admiral's flagship, USS *Estes* [AGC-12] arrived in Tonkin Bay on 18 August 1954. Many of these ships had too deep a draft to go up the Red River channel to Haiphong, but could be loaded from LSTs which were more suitable for embarking personnel from the beaches along the Red River.

The scene seemed peaceful with merchant ships plying toward the Red Delta. Sampans with butterfly sails were yawing and tacking about on an undestined course. We dropped our "hook" at 1700 hours. American Military Assistance Group officers from Haiphong came aboard for a conference on evacuation problems. We found it was necessary for us to establish good liaison with the French and Vietnamese in order to give medical assistance where and when indicated and to expedite the delousing of refugees at our embarkation points in the Red Delta.

On 19 August 1954 RADM Sabin directed us to go ashore to establish the necessary medical sanitary facilities which would be needed for the refugees and, insofar as possible, to establish good liaison with the French and Vietnamese to expedite the mission. Our flagship lay about 2 miles offshore from the mouth of the Red River. We went ashore with a jeep and landed on the Do San Peninsula.

I was accompanied by LT Edward Gleason, MSC, USNR, a public health officer of the Navy. After disembarking on a hard seaplane ramp, we made our way toward Haiphong, a distance of 20-25 miles over a hard-surfaced tarmac toad, passing many guarded roadblocks. French, African, and Vietnamese troops were manning these stations. The French Foreign Legion was very much in evidence. We passed over a broad plain being planted with rice. Many carabaos were plowing the deep mud and water of rice paddies. These pastoral scenes were soon to stand out in sharp relief against conditions we were about to view in Haiphong and its environs.

As we entered Haiphong, we found every available vacant lot, parks, schools, and vacated buildings packed with refugees. We estimated there were about 200,000 at that time. They were living in the most squalid conditions—no sanitary conveniences. The human excreta combined with the presence of enormous numbers of flies were the making of epidemic diseases among these unfortunates. We visited other camps outside the city which had been set up from their meager belongings.

These camps were usually near a pool of rice paddy water. There were no sanitary arrangements. People were sitting under shelters, improvised from rice mats, cloth, or some type of plastic. Tents and shelter facilities were limited. Water was taken directly from the rice paddies and consumed raw. Wormy feces were common and carelessly scattered about. Flies were present in large numbers. The heat was intense. Strong odors permeated the air.

There were many pregnant women as well as many small children and old people. The absence of young men was obvious. Family groups huddled together and seemed quite destitute.

Meetings were held with various French and Vietnamese officials, including Vietnamese Public Health people of Haiphong regarding assistance the Navy might render in expediting the welfare and evacuation of refugees from the city. LT David Davis, MC, USNR, and LTJG Thomas A. Dooley III, MC, USNR*, served as French and English interpreters during these interchanges of view and expressions of international goodwill. We found the civilian Vietnamese to be very nationalistic and determined to run their own show. However, we indicated that wherever we might be of service in getting better camps set up, good water supply, and providing additional medical supplies, we would be glad to do so.

Our Military Assistance Group and a representative of the Foreign Aid Administration, Mr. Michael Adler, were primarily effective in bringing in

*LTJG Dooley went on to write *Deliver Us From Evil*, recounting his experiences in this operation.

tents and getting two new tent camps set up outside of Haiphong to be used as a staging area for about 12,000-14,000 refugees just prior to embarkation. After these were erected by Legionnaires and French Algerian troops, our Navy medical group took over sanitation of these camps and, under the direction of LT Gleason, we set up units for the filtration and purification of water.

At first the natives were slow to accept this clean, clear, chlorinated water but after some days took freely of it. There were saboteurs in these camps who slashed our large rubber water storage tanks but this was stopped by erecting a barbed wire barrier around each tank and putting Senegalese guards from the Foreign Legion to prevent such incidents.

As soon as the Military Assistance Group, Foreign Aid Administration, and French and Vietnamese Evacuation Committees began moving the refugees from the staging area to our embarkation points along the Red River, we set up DDT dusting stations manned principally by U.S. Navy corpsmen and beachmaster personnel, through which all refugees passed to have their bodies and personal effects disinsecticized before embarking on our ships. They passed through our lines at the rate of 1,000 per hour. Mechanical power dusters with 10 outlets were used. Several of these were in operation. The majority of the refugees were Catholic Tonkinese led by their priests. There were other groups as well, particularly Chinese families who had been in Indochina for generations.

In the staging areas and at our embarkation points, medical attention was provided mainly by the Vietnamese Public Health Services of Haiphong. We gave impetus to this service from the start, as none was provided the refugees during their great influx into Haiphong. The Vietnamese Public Health Service immunized all refugees against cholera and smallpox.

There was a lack of medical supplies among the Vietnamese, and these were provided from the American Foreign Aid Organization sources upon our recommendation and selection. It was evident that the peasants from the interior of the country had had little, if any, medical attention all their lives. One could surmise from the total number of medical practitioners in the country that 23 million people could not get adequate medical care from 500 doctors, the majority of whom were concentrated in the larger cities.

One was daily confronted with hordes of people with different eye diseases. Blindness was prevalent in the young as well as the old. Pyogenic infections of the scalp of young children were very common as well as

Vietnamese troops are dusted with DDT by Navy preventive medicine personnel before boarding an LST that will take them south.

numerous other skin diseases. Dysentery and intestinal parasites were also very common, and one only had to walk through a campsite any morning to see the writhing worms in the fresh stools scattered about.

Malaria was prevalent in all groups, and some were too ill to accept passage at times. Whenever a person was found too ill to be sent to sea, usually the whole family would fall out of line and stay behind as the family ties were very strong, and they sensed that their best chance of survival rested in a family unit.

All were poorly clad, wearing only their cotton trousers, top shirts, and a peaked straw sun hat. Nearly all were barefoot and practically all children were half dressed or naked.

Just before embarkation, each mother was given a blanket or a sheet for babies in arms. Funds for this were provided by the American Foreign Aid Organization and local Vietnamese social workers supervised by Mme Vu Thi Ngai, who dispensed the cloth as indicated. Mme Vu Thi Ngai also maintained her own private orphanage in Haiphong which enabled her to rescue many lost or abandoned babies and young children. She gathered about 400-500 around Haiphong. To all these children we gave medical attention. Her orphanage was eventually transferred to Saigon, but her efforts still required much outside support if these children were to survive.

All refugees were permitted to take as much personal baggage as they could carry on a split bamboo pole loaded at each end and mounted over their shoulders. Usually these personal effects consisted of a rice mat to sleep on, cooking utensils, and rice and fish. Rice constituted most of the weight. However, rice and fish were provided on board ship for each contingent during their passage south. Each ship provided medical care to everyone during their sea journey, which for many was the first in their lives. Motion sickness was common. Their wounds were dressed by our corpsmen and more serious cases like fractures, obstetrics, and fevers were handled by a Navy doctor.

The disposal of the dead at sea posed some questions as to the nationality of the individual, his religion; the desires of the immediate family had to be taken into consideration. It so happened that almost everyone who died en route was Christian and burial at sea was permitted. It was estimated at the start of operations that we might have an average of four births and two deaths on each sea trip. These estimates proved to be fairly accurate. Barrier paper was provided by the Navy in which the remains were wrapped and the usual Chris-

tian burial rites were performed before being committed to the sea.

I shall now refer to some phases of our work in connection with the evacuation. We anticipated the need for laboratory controls in our preventive medicine activities associated with our ships and their personnel. This laboratory had to be shore-based in order to serve our ships which plied back and forth between Haiphong and Saigon and points between. We asked the French Naval Commandant, RADM Jean Querville, for space in one of his buildings on the French naval base along the Red River at Haiphong. He quickly and graciously provided running water, electrical service, and an electric refrigerator. We were in business.

LT Richard Kaufman, MSC, and five corpsmen set up and manned departments in bacteriology, entomology, parasitology, and general zoology. This enabled us to collect and process important medical material, make water analyses for all our ships, identify insects of medical importance in the region, and ascertain the kinds of human parasites in this population.

We had two combat cameramen attached to our shore unit for the purpose of making a record of the refugee movement. All scenes shot followed a prepared script to assure complete coverage of every aspect of the refugees' life from the time they were seen approaching Haiphong, arrival in villages and camps, medical care, food and shelter, DDT work and embarkation, and also their sea trip and life en route to destination in southern Indochina.

The life of the refugees was not without hazard and discomfort even in our improved camps. Typhoons blew down tents; rain and high tides flooded them out on numerous occasions. Tents were struck by lightning, killing or injuring the occupants. We made many medical inspection tours among the people in our camps to administer to their needs in addition to the Vietnamese first aid arrangements which were set in motion by us.

We combated much of the adverse communist propaganda that was prevalent about Americans. Many erroneous ideas were sown: Our DDT was a slow poison;* that we were going to charge $60 a head for passage to freedom; that we might drown them at sea by opening up our LST bows; or that we might take them away from Indochina forever. Reports of communist atrocities on refugees were coming in, and we saw some evidence of beatings and bayonet wounds. Also, mothers reported the communists would wrench babies from their arms and run away with them in order to break up families and impede the exit of these people from communist-won areas. All these hazards and diversions thrown in their path were contrary to the Geneva Accord signed by both the communists and the French which agreed to let each person have a free choice as to the side on which he wished to live and be allowed to go unmolested to that area.

By 21 September 1954, after a month's movement of refugees, the 100,000th refugee passed through our embarkation point. He was an itinerant tobacco salesman with a wife and four children. They were photographed, picked up by one of our helicopters, flown to our flagship, and taken to Saigon that way instead of the usual sea trip on one of the regular transports. This family was feted in Saigon upon arrival and given presents and made to feel that there was a bright future for themselves and all their people who had been rudely uprooted from their ancestral abodes.

By the end of September 1954, fewer refugees were coming in as the Vietminh, or communists, were controlling their movements. All their sampans were confiscated and other means of transportation were taken away. However, the refugees continued to come through, and, during late October and November 1954 thousands of people escaped from Bin Chi, Phat Dien, and Tani Binh areas of Tonkin.

Many managed to reach the 3-mile continental limit on rafts and small junks where RADM Querville's small naval craft picked them up and brought them up the Red River at night to our embarkation site. The health of these people was poor, as they had endured many months of hard labor under the communists, rebuilding their railroad. In addition, they had to find their own food where they could, as none was supplied by the masters of North Indochina. Many were found beaten and fractures were common.

By the end of January 1955, about 200,000 refugees had been moved by the U.S. Navy. The refugees were still being moved by sea at the rate of 6,000 per week and by French Air at the rate of 500 per day. Haiphong was by this time a dying city. Nearly all business had ceased and moved out. Of the 100,000 French forces there in August 1954, less than 15,000 now remained. All Vietnamese Public Health people had gone south to Saigon.

By the middle of March 1955, we were able to strike our temporary camps for refugees and house them

*DDT's adverse and long-lasting impact on the environment was unknown in 1954 but, in fairness, it was the most effective insecticide then available.

in the huge abandoned military barracks in the city of Haiphong. Our water purification units were recrated and put aboard our transports for safekeeping. The water supply in Haiphong would suffice for the refugees. We continued to delouse the refugees before embarkation on our ships. Also, we sprayed for fly and mosquito control in the areas where refugees were housed in Haiphong as the insect problem was immense and almost overwhelming.

By this time about 750,000 refugees had been taken out; 250,000 of them in American bottoms. RADM Sabin's task force expeditiously and with tender care moved these people to safety. The force medical officer, CAPT James Grindell, MC, coordinated the medical activities between the ships of the task force and maintained continuous medical service for the refugees from the embarkation point to the debarkation points in South Indochina. He also instituted preventive medicine measures for the maintenance of health of all our naval personnel manning Task Force 90. Weekly suppressive doses of chloroquine against malaria were taken by everyone, immunization boosters were given, rat and insect control measures were stepped up, and each ship was cleaned after each load of refugees debarked. CDR Sidney Britten, MC, relieved me, and later he was relieved by LTJG [Thomas] Dooley, who remained in charge of medical activities in Haiphong until the communists moved in on 19 May 1955.

The French pulled out their last forces of 12,000 on 7 May. Their remnant forces were on the Do San Peninsula, the last bit of land at the end of the Red Delta. Subsequent movement would be removal to sea by their navy.

Epidemics and famine were beginning to occur in Annam and Tonkin. All health and immunization programs had begun to break down in communist areas. The horsemen of the Apocalypse have taken over where once peace, plenty, and happiness reigned. The U.S. Navy, however, wrote a new chapter in its long and glorious history in defending the weak, rescuing them from slavery and death. ❑

Dr. Amberson died in 1988.

Navy corpsmen treat eye infections at the La Pagode refugee camp, Haiphong.

Roxie
The Pontiac Ambulance of Parris Island

CDR Jonathan (Jon)Van Dermark, DC, USN, is the director of Advanced Education in the General Dentistry program at Naval Dental Center Parris Island, SC. In his free time he serves as a member of the hallowed fraternal order of car lovers. Yes, we all know individuals who owe their automotive allegiances to Vettes, VW Bugs, and old Plymouths. CDR Van Dermark loves these cars, but his allegiance is unique. He loves classic ambulances and always has. "When I was a little kid, I chased fire trucks and ambulances; when I was a young adult working as a paramedic, I actually drove fire trucks and ambulances. Now that I'm an older adult, I guess I am chasing them again."

Photos courtesy of CDR Van Dermark

Roxie, before restoration.

While searching for an old Department of Defense ambulance, CDR Van Dermark came across a Professional Car Society member selling a 1967 Pontiac ambulance. Yes, this is the same car company that brought us the GTO in 1964, the first true muscle car. In the 1960s, when Cadillacs were still king, and ambulances were still their domain, Pontiac began making a mid- to low-priced alternative to the Cadillac ambulance. Many military medical departments bought Pontiacs for their sleek design, and, more importantly, their affordability. In October 2003, CDR Van Dermark bought the Pontiac from a Car Society member in west Texas, for the same reasons. He loaded it on a flat bed truck and transported it to his home in Parris Island.

The car's condition was already very good with minimal rust. CDR Van Dermark recovered the seats, replaced the carpeting, and repainted the entire vehicle. As Van Dermark confesses, "It's been mostly basic

maintenance stuff, changing the fluids, spark plugs, wires, distributor, and rebuilding the carburetor; I'm currently having the air conditioner compressor worked on. It's a big car with a lot of glass so it's like driving a giant greenhouse. I would like to get the air conditioner running."

Greenhouse maybe, but like all Pontiacs in the era of the American classic car, the ambulance is still sleek. The design is what's called a coke-bottle style. If you look at the car in profile, it narrows down like an old coke bottle making it appear that it is moving when it is at rest. Pontiac the way around rather than disc brakes. It takes a lot to slow it down. It is a very comfortable ride. The suspension absorbs every little bump on the road. It's not very nimble with cornering because it's almost 24 feet-long." However, for anyone planning to take a family on a road trip, the car is large enough to fit seven passengers including one reclining.

"Christine" aside, all classic cars must have a good name. Van Dermark admits that even though his car "has been called a lot things by lots of different people," he has settled on the name "Roxie." In Parris Island, lance drive by, complete with a Charlie-Papa-One license plate, and a "Naval Hospital" logo on its doors, there's no need to be alarmed. Give her a wave and be assured that the Navy Medical Department has another friend out there, Roxie be thy name.

Postscript

Although, Roxie's future looks bright, CDR Van Dermark would like to find her a companion. Up until the 1950s the Navy Medical Department contracted with the Packard-Henny company to produce ambu-

Roxie after restoration, and ready to roll.

in the 1960s insured that even their ambulances gave the impression of speed.

When asked about how it drives, CDR Van Dermark is honest in his response, "I jokingly say it drives like a double bed on wheels. It has very soft suspension, partly because the suspension is very old and worn. It accelerates very well. It has a 400-cubic-inch engine that's moving 7,300 pounds of car. It doesn't stop really well because it has drum brakes all and Naval Hospital Beaufort where CDR Van Dermark teaches an EMT course, everyone knows Roxie; you could say she's become a South Carolinian landmark. His EMT classes and dental school residents have had their class pictures taken with her, and this spring, when she is more mechanically sound, CDR Van Dermark hopes to take her around to regional medical and dental schools as a recruiting tool. So, if you are ever down south and see a large gray and white ambulances. Unfortunately, many of these unique vehicles did not survive the scrap heap. If you should have information on a Packard-Henny Navy ambulance for sale please contact the Navy Medical Historian's Office at ABSobocinski@us.med.navy.mil or CDR Van Dermark directly at jgvandermark@ndcpi.med.navy.mil.❑

–Story by André B. Sobocinski, Assistant Historian and staff writer for *Navy Medicine*, Bureau of Medicine and Surgery (M00H), Washington, DC.

RADM Joseph S. Cassells, MC, USN (Ret.), died on 2 July 2004 of pancreatic cancer at his home in Bethesda, MD. He was 69.

Dr. Cassells was born on 9 November 1934 in Chester, SC. He graduated from Duke University School of Medicine in 1960, and began his active duty in 1960 with an internship at the National Naval Medical Center, Bethesda, MD.

Dr. Cassells served as general medical officer with the 3rd Marine Division, Okinawa, Japan (1961-1962). He then served his residency in internal medicine at Naval Hospital St. Albans, NY (1962-1965). From his residency he served as an internist at U.S. Naval Hospital Subic Bay, Republic of the Philippines (1965 to 1967). He received his master's degree in public health from Johns Hopkins University School of Public Health, Baltimore, MD, in 1968.

Tropical disease became a growing concern during the Vietnam War. As a result, Dr. Cassells requested and was granted a fellowship in tropical medicine at Johns Hopkins Center for Medical Research and Training. This fellowship included a year of research in Calcutta, India (1968-1969). Upon his return to Washington, he continued his work and research in tropical medicine with positions as Head, Academic Department, Naval Medical School, and consultant on tropical medicine, National Naval Medical Center, Bethesda, MD, (1969-1971). He also served as Chief, Experimental Parasitology Division, Naval Medical Research Institute, Bethesda, MD, (1971-1974).

Dr. Cassells later served as Project Director, Navy Physician's Assistant Program, (1973-1975); Head, Medical Corps Programs, Naval Health Sciences Education and Training Command, Bethesda, MD, (1974-1975); Deputy, Special Assistant to the Surgeon General for Education and Training, Washington, DC, (1975-1977); Special Assistant to the Surgeon General for Professional Matters, Washington, DC (1977-1978).

In the late '70s, RADM Cassells' career focused on healthcare management and administration. He became the Director of Clinical Services, Naval Regional Medical Center, San Diego, CA (1978-1980), followed by Commanding Officer, Naval Regional Medical Center, Charleston, SC (1980-1982). During this time he also served on the faculty at the Medical University of South Carolina and as Associate Dean and Clinical Professor of Community Medicine at the University of California, School of Medicine.

Upon his return to Washington, DC, he served as Deputy Commander for Health Care Operations, Naval Medical Command (1982-1983) and Medical Officer of the Marine Corps (1983-1985). Dr. Cassells spent the last 3 years of his military career as Commander, Naval Medical Command. He retired from naval service on 29 July 1988.

His military awards included the Legion of Merit, Meritorious Service Medal, Meritorious Unit Commendation, Navy Expeditionary Medal, and the National Defense Service Medal. He received two awards from the Association of Military Surgeons of the United States, the 1979 Founder's Medal and the Richard A. Kern Lecture Award in 1994.—JMH ❑

CAPT Edward D. Thalmann, MC, USN (Ret.) died of congestive heart failure at his home in Durham, NC, on 24 July 2004. He was 59.

Dr. Thalmann was a native of Jersey City, NJ, a 1966 graduate of Rensselaer Polytechnic Institute, and a 1970 graduate of Georgetown University Medical School.

Soon after joining the Navy in the early 1970s, he developed a mathematical formula known as the Thalmann Algorithm, used to predict the effect of pressures on divers, based on the ability of human tissues to absorb and release gases. That research helped replace established procedures more hazardous to divers. With his new formula, Thalmann supervised hundreds of experimental dives to develop and verify a new set of time and depth limits. His work increased the operational capabilities of military divers, such as Navy SEAL teams and rescue and salvage divers.

Dr. Thalmann also helped develop protocols to protect U.S. astronauts when they leave the protective environment of the International Space Station for the lower atmospheric pressure of their space suits.

His final active-duty assignment, in 1993, was at the Naval Medical Research Institute in Bethesda, MD, as head of the Diving Medicine Department. He was also director of decompression research programs at the Institute.

Since 1994, Dr. Thalmann had been an assistant clinical professor in anesthesiology at Duke University's Center for Hyperbaric Medicine and Environmental Physiology. He was also assistant clinical professor of family and community medicine at Duke.

His military decorations included the Legion of Merit. ❑

Navy Medicine Seeks Articles

While many quality articles are submitted to *Navy Medicine*, we are constantly looking for greater diversity. Because Navy medicine is a dynamic, changing institution, we would especially like this journal to provide an opportunity for the free exchange of ideas, opinions, and innovations. There is no one topic that assures publication, but here are some general topics we would like to see more of:

1. ***Research*** - cutting edge research of both a professional and clinical nature. We are also interested in research articles geared for the lay reader.
2. ***History*** - historical articles related to Navy medicine.
3. ***Unusual experiences*** - first person accounts of current events, such as the "War Against Terrorism" or other deployments, natural disasters, and humanitarian exercises. Third person accounts are also encouraged as they generally add a broader perspective. Even if these articles are not published, informative pieces will be accessioned into the BUMED Archives for research purposes.
4. ***Opinion*** - thought-provoking editorials and opinions on whatever you feel is important: for example, downsizing - how do current military reductions affect Navy medicine; the future - what does the future portend for Navy medicine (fleet health support, dependent care, TRICARE, Readiness, Optimization, Integration, etc.), and the individual corps.
5. ***Professional/Clinical articles*** - when writing professional/clinical articles, remember that the aspect of care or innovative practice should be unique or particularly relevant to Navy medicine, i.e., treatment of tropical diseases which afflict Navy personnel during deployments.

An author does not need to be a member of the Navy to submit articles for consideration.

Contributions are suitable for consideration by *Navy Medicine* if they represent original material and have been approved by each author, and have secured command approval/clearance.

Please contact:

Janice Marie Hores, Assistant Editor, at **jmhores@us.med.navy.mil** or 202-762-3246 for a complete copy of the Guidelines for Contributors.

Book Review

Two Little Books, Two Big Stories

Registered Nurse to Rear Admiral: A First For Navy Women by Estelle McDoniel. Eakin Press, Austin, TX. 81 pages. 2003.

This is the biography of RADM Alene Bertha Duerk, the first woman selected for flag rank in the United States Navy. Written by RADM Duerk's niece, a children's author, McDoniel has an audience of young women in mind.

The book opens with nurse Duerk standing at the rail of USS *Benevolence* in 1945 as the hospital ship heads for Japan with the Third Fleet. LT Duerk muses on the Third Fleet's size. "Seeing all those ships moving together on the Pacific Ocean was an awesome sight." With thoughts of home and her mother in Ohio, the author segues into Chapter Two and the birth of Alene Bertha Duerk on 29 March 1920.

Her father, Albert, had fought in Germany in World War I. He did not return from the war in the best of health, and Alene always remembered the nurses that came to the house to help care for him. She believes those nurses were her first introduction to nursing. Sadly, her father died when Alene was 4 years old.

Her widowed mother, with two small daughters, moved with the girls to her parent's farm. In 1930's America there were few jobs acceptable for a woman, but that of nurse, teacher, cleaning lady, store clerk, or beauty parlor operator. Alene decided to be a nurse and, with her 1938 graduation from high school, started training at the Toledo Hospital School of Nursing.

In 1941 she graduated as a registered nurse. Her first job was in the delivery room of the hospital.

The Japanese bombed Pearl Harbor, and America declared war on Japan. Alene left the hospital and took a job as a department store nurse. Women were replacing men in the workforce and employers wanted that work force to be healthy.

While working at the store, Alene received several calls from the Red Cross, which was recruiting nurses for the Navy. At first Alene declined. Soon recruitment posters were up everywhere and the young nurse knew her skills were desperately needed by the Navy. When the Red Cross called again she told them she would volunteer, and soon became ENS Alene B. Duerk, NC.

The author follows her aunt's career from entering the Navy through World War II, to her leaving the service and joining a group called "Ready Reserve Nurses," to being recalled in 1951 during the Korean War. McDoniel not only documents RADM Duerk's career, but the changes in America's culture and attitude regarding women through the years. It took 5 years of masculine discussion before Duerk was selected for flag rank. The discussions of the female sailors' place in the Navy and a woman's place in America's workforce will, I am sure, amuse any young woman born after the 1960's.

RADM Duerk retired in 1975 and lives in Longwood, FL.

Although written for a younger audience I found the book to be charming and an enjoyable read. It is a very concise and well written biography of one of our foremost Navy medicine pioneers. ❑

* * *

The second little book with a big story is really just a pamphlet

The First Navy Flight Nurse On A Pacific Battlefield by LT Gill DeWitt, USN. The Admiral Nimitz Foundation, Fredericksburg, TX. 26 pages. 1993.

LT DeWitt was a Navy photographer during World War II in the Pacific. After his death, his widow donated his World War II artifacts to the Admiral Nimitz Foundation in Fredericksburg, TX. Among those mementos was a photo album with a story written under the pictures. Rather than rewrite the account, the foundation merely copied the pages as they are to tell the story. The story is of ENS Jane Kendeigh, the first Navy Flight Nurse to serve on the battlefield at Iwo Jima.

The little book is out of print, but you can find it from used book dealers through Amazon.com and BarnesandNoble.com. You may also contact the Admiral Nimitz State Historical Park, P.O. Box 777, Fredericksburg, TX 78624; (512) 997-4379.

I highly recommend this little book that tells a great big historical story. ❑

—Janice Marie Hores is Assistant Editor for *Navy Medicine*, Bureau of Medicine and Surgery (M00H), Washington, DC.

Navy Medicine ca. 1930

BUMED Archives

Pharmacists' mates relax at Naval Hospital Portsmouth, VA.

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